

IN THE CLAIMS:

By this amendment, claims 1-36 and 63-87, which are the subject of the restriction requirement of paper 20040712, are cancelled without diminution or disclaimer of the indicated subject matter. Applicants note the right of the Applicants to amend the canceled claims back into the application if a bridging claim is found allowable (MPEP§ 809.02) and to file any divisional and/or continuation applications in accord with 37 C.F.R 1.53(b) and MPEP§§ 201.11, 201.06(c). Claims 37, 38, 40-42, 44-45, 52, 56, 57, 59, 61, and 62 stand currently amended and claims 39, 43, 46-51, 53-55, 58, and 60 stand as originally presented are newly added. This listing of claims will replace all prior versions, and listings, of claims in the application:

CLAIMS LISTING:

Cancel claims 1-36

37. (currently amended) A multiple battery system comprising:

a battery housing having a common positive terminal and a common negative terminal coupled to an electrical system;

a main battery having a main positive output and a main negative output;

~~an auxiliary~~ an at least one standby battery having ~~an auxiliary~~ standby positive output and ~~an auxiliary~~ standby negative output;

a switching device with at least two operating positions, the at least two operating positions selectively engaging said main battery ~~and or said auxiliary~~ at least one standby battery and comprising;

a first operating position of said at least two operating positions wherein the
common positive terminal is coupled to the main battery positive output and ~~is further~~

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~~coupled~~ operates the electrical system from the main battery and is simultaneously
~~coupled~~ to the at least one ~~auxiliary~~standby battery positive output through a one-way
charging circuit ~~between and preceding the at least one auxiliary battery~~ which allows
recharging of the at least one standby battery but prevents discharging of the at least one
standby battery by the electrical system and;

a second operating position of said at least two operating positions which
decouples the common positive terminal from main battery and couples the common
positive terminal to the at least one standby battery ~~the auxiliary positive~~ such that the
~~common positive terminal is coupled at a point beyond the one-way electrical system~~
operates from the charging circuit to the auxiliary at least one standby battery ~~battery~~
positive.

38. (currently amended) The multiple battery system of claim 37, wherein the second operating position puts the ~~auxiliary~~standby battery alone in series with the electrical system and prevents electrical energy in the ~~auxiliary~~standby battery from flowing to the main battery.

39. (original) The multiple battery system of claim 37, wherein the one-way charging circuit electrically isolates the main battery in the second operating position.

40. (currently amended) The multiple battery system of claim 37, wherein in the first operating position, the one-way charging circuit permits electrical energy from the electrical system to flow into both the main and ~~auxiliary~~standby batteries, but prevents electrical energy from flowing out of the ~~auxiliary~~standby battery.

41. (currently amended) The multiple battery system of claim 37, wherein only the positive outputs of the main battery and the at least one ~~auxiliary~~standby battery are switched by the switching device.

42. (currently amended) The multiple battery system of claim 37, wherein the second operating position of the at least two operating positions fully disconnects the main battery from the electrical system and introduces only the at least one ~~auxiliary~~standby battery.

43. (original) The multiple battery system of claim 37, wherein the main battery is one of a six-volt, twelve-volt, or twenty-four volt battery.

44. (currently amended) The multiple battery system of claim 37, wherein the at least one ~~auxiliary~~standby battery is one of a six-volt, twelve-volt, or twenty-four volt battery.

45. (currently amended) The multiple battery system of claim 37, wherein the battery housing further comprises a main battery compartment containing the main battery and an at least one ~~auxiliary~~standby battery compartment containing the at least one ~~auxiliary~~standby battery, the main battery compartment being located atop the at least one ~~auxiliary~~standby battery compartment.

46. (original) The multiple battery system of claim 37, the battery housing further comprising at least one fill tube.

47. (original) The multiple battery system of claim 37, wherein the one-way charging circuit comprises an at least one-way charging diode.

48. (currently amended) The multiple battery system of claim ~~47~~37, wherein the at least one-way charging ~~diode circuit~~ further comprises an at least one silicon rectifier.

49. (original) The multiple battery system of claim 48, wherein the at least one silicon rectifier has between about a 25 and 95 amperage rating.

50. (original) The multiple battery system of claim 48, wherein the main battery is a 12-volt automobile battery and the at least one silicon rectifier has a 12-volt, 45 amp rating.

51. (original) The multiple battery system of claim 37, wherein the charging circuit further comprises an at least one high capacity diode and an at least one heat sink coupled to the at least one high capacity diode.

52. (currently amended) The multiple battery system of claim 51, wherein the at least one high capacity diode has between ~~about~~ 25 and 95 amperage rating.

53. (original) The multiple battery system of claim 51, wherein the at least one high capacity diode has a 12-volt, 45 amp rating and the at least one heat sink coupled to the high capacity diode has a sufficient surface area to dissipate the heat generated by the at least one diode.

54. (original) The multiple battery system of claim 37, further comprising a controller coupled to and switching the switching device.

55. (original) The multiple battery system of claim 54, further comprising at least one sensor in communication with the controller.

56. (currently amended) The multiple battery system of claim 55, wherein the at least one sensor in communication with the controller includes an at least one switch position sensor to detect the position of the switching device and wherein the controller actuates the switching device based on input from the at least one switching device sensor and at least one of a main battery voltage sensor, a main battery ~~cold cranking~~amperage sensor, ~~an auxiliary~~a standby battery voltage sensor, and ~~an auxiliary~~a standby ~~cold cranking~~ amperage sensor.

57. (currently amended) The multiple battery system of claim 37, further comprising ~~an~~a standby battery discharge system.

58. (original) The multiple battery system of claim 37, wherein the discharge system further comprises a controller with a timer.

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59. (currently amended) The multiple battery system of claim 58, wherein the timer signals the controller to periodically change the switch position so as to discharge the ~~auxiliary~~standby battery in the second operating position of the at least two operating positions for short periods and then switches back to the first operating position of the at least two operating positions.

60. (original) The multiple battery system of claim 58, wherein the discharge system comprises a written instruction to manually switch the battery system to the second operating position for a brief period of time and then to manually switch the switching device to the first operating position.

61. (currently amended) The multiple battery system of claim 58, wherein the controller switches the switching device to couple the common positive terminal to the ~~auxiliary~~standby battery positive output if an input signal from an at least one sensor indicates that the main battery voltage is below a trigger point.

62. (currently amended) The multiple battery system of claim 37, further comprising ~~an~~ auxiliary~~a~~ standby battery cyclic discharge system comprising a timer coupled to the switching device, wherein the timer periodically actuates the switching device to the second operating mode for a short period of time and, then, actuates the switching device back to the first operating mode after the short period of time.

Cancel claims 63-87